REMARKS/ARGUMENTS

Applicants would like to thank Examiner Dove for the courteous and helpful discussions she had with Applicants' U.S. representative on January 13, 2005. At that time, the Applicants' U.S. representative discussed the differences between the cited reference and the Applicants' claimed invention. In the discussion, the Applicants' U.S. representative explained that the cited reference does not teach or suggest the presently claimed solid polymer electrolyte material made of a copolymer comprising a monomeric unit having an alicyclic structure in its main chain and a monomeric unit having a sulfonyl containing fluoromonomer of Formula (1) given in Claim 1. The following is intended to expand upon that discussion.

The rejection of Claims 1-12 under 35 U.S.C. §102(b) over Banerjee (U.S. 6,156,451) is respectfully traversed.

Banerjee describes a process for making a composite ion exchange membrane by fabricating a layered membrane precursor including a microporous support of fluorinated nonionic polymer adhered to a layer of ionic fluorinated sulfonyl halide polymer. The membrane in Banerjee is composed of one layer that contains a nonionic polymer and another layer that contains an ionic sulfonyl halide polymer. The ionic sulfonyl halide polymer may optionally include nonionic monomeric units that are not cyclic in structure (see column 3, lines 38-63).

The present claims include a solid polymer electrolyte material made of a copolymer comprising a repeating unit based on a fluoromonomer which gives a polymer having an alicyclic structure in its main chain and a repeating unit based on a sulfonyl-containing fluoromonomer of Formula (1) in Claim 1.

Banerjee describes monomeric units for the fluorinated nonionic polymers that make up the support layer that include perfluoro(1,3-dioxole) and perfluoro(2,2-dimethyl-1,3-

dioxole) (see column 6, lines 7-24). However, Banerjee does not describe membranes that contain an individual copolymer with both fluorinated nonionic repeating units based on a fluoromonomer which gives a polymer having an alicyclic structure and ionic fluorinated sulfonyl halide units. Because Banerjee does not describe combining monomeric units having an alicyclic structure with monomeric units of an ionic sulfonyl-containing fluoromonomer, the presently claimed material cannot be anticipated by Banerjee.

As noted above, Banerjee does describe nonionic monomeric units that can be copolymerized into the ionic sulfonyl halide polymer, however, none of these nonionic monomer units are alicyclic in structure. For example, Applicants note that one such monomeric unit can be a perfluoro(alkyl vinyl ether) (see column 3, line 55). Incorporation of this monomeric unit into the ionic sulfonyl halide polymer will not give the claimed alicyclic structure in its main chain. In contrast, the perfluoro(3-butenyl vinyl ether) claimed in Claim 5 of the present application will give the claimed alicyclic structure owing to the fact that this monomer is a perfluoro(alkenyl vinyl ether) and not a perfluoro(alkyl vinyl ether). In this case, the alkenyl moiety will form an alicyclic structure when the claimed polymer is formed.

Overall Banerjee does not describe all the claim limitations of the presently claimed material. In addition, Banerjee does not teach or suggest a material comprising a copolymer with both repeating units based on a fluoromonomer which gives a polymer having an alicyclic structure and repeating units based on ionic sulfonyl-containing fluoromonomer. Therefore, the presently claimed material is not anticipated or obvious over Banerjee, and accordingly, Applicants respectfully request that the Examiner withdraw the rejection.

The rejection of Claims 1-12 under the judicially created doctrine of obviousness-type double patenting over Claims 1-8 of U.S. Patent No. 6,610,789 has been obviated by the

enclosed Terminal Disclaimer. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection.

The rejection of Claims 1-12 under 35 U.S.C. §102(e) over Watanabe (U.S. 6,610,789) is respectfully traversed.

Applicants note that the §102(e) date for Watanabe is February 14, 2001 and that Applicants have claimed priority under 35 U.S.C. §119 to Japanese Application Number 2000-395511 filed on December 26, 2000 which is prior to the §102(e) date of Watanabe. Applicants further direct the Examiner to the attached certified English translation of this Japanese Application. Applicants note that the Japanese Application fully supports the present claims and Applicants request that the Examiner recognize that the Applicants have perfected their priority claim. Since the Applicants have perfected priority of this Japanese Application over Watanabe, the rejection is no longer tenable and Applicants respectfully request that the Examiner withdraw the rejection.

The rejection of Claims 1-12 under 35 U.S.C. §112, second paragraph has been obviated by amendment. As the Examiner will note, the Applicants have amended the claims such that they are free of the criticisms outlined by the Examiner on page 5 of the Office Action. Therefore, the rejection is no longer tenable and Applicants respectfully request that the Examiner withdraw the rejection.

In light of the above remarks contained herein, Applicants respectfully submit that the present application is now in condition for allowance. Favorable reconsideration is respectfully requested.

Respectfully submitted,

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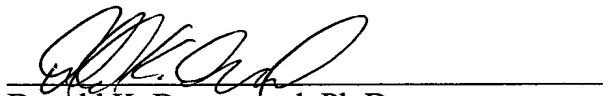

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